

dog. After the wound had healed, the boy never again complained of it, and he manifested no alteration in temper or manner. He was usually of quiet habits, and not much addicted to drink. He had always lived at home, and the father felt certain he should have known if any bite, wound, or other injury had occurred to him since the one mentioned. He had enjoyed excellent health, in every respect, until Friday, the third day previous to his admission. On the afternoon of that day (he had been staying at home, being out of work,) he went to sleep, and woke up in the evening, appearing disturbed, and stating that he had a very bad dream. He afterwards took some tea, and then went out for awhile. At night, he complained of a severe headache. On Saturday, he still complained of not being well, but, in the afternoon, walked with his father a distance of some miles, to "tumble" at a neighbouring village. Late in the evening, he commenced the practice of his evolutions, but, after having stood once on his head, complained that it had hurt him so that he must give it up. During the walk home, his father noticed that his limbs seemed weak, and the journey took them many hours. Throughout Sunday he stayed in the house, still complaining of "splitting headache," and appearing very ill. He could, however, swallow fairly, and had no noticeable difficulty in doing so. Late in the evening he got up, and went alone to a neighbouring public-house to get some beer, which he drank, but, as the landlady who served him afterwards stated, with the greatest difficulty, as "it seemed as if it would have choked him." On Monday morning he said he could not drink, and took only a little sopped biscuit, which he appeared scarcely able to get down. In the afternoon of that day the attacks of spasm began to occur. He exhibited the greatest terror of some impending mischief, although perfectly conscious. A medical man who had been sent for entering the room, he begged him not to approach, as he could not, he said, help striking him if he did. These symptoms becoming rapidly aggravated, he was, as we have already seen, conveyed to the hospital late in the evening.

Having already entered so fully on the incubation question, we have not much to add in the shape of comment on the above. The premonitory symptoms of the outbreak, the duration of the attack, and the nature of the illness, presented nothing different from the ordinary course of hydrophobia. It is worthy of note, that the lad had manifested no form of nervous disease whatever during the long interval subsequent to the bite. The fatal attack could not in any way be attributed to fear or apprehension, since he did not appear to have in the least anticipated any ill consequences from his accident. The effect of the chloroform inhalation would seem to have been almost precisely similar to that which we have noted in many of the more acute cases of tetanus, which have been mentioned in the series we are at present engaged on. The drug was efficient in allaying the morbid irritability, and in completely controlling the tendency to spasm, but exercised no preventive influence. Its effects rapidly passed off when inhalation was relinquished, and the vital powers of the patient failed as fast as they could have been expected to do had it not been used.—*Med. Times and Gaz.* May 27, 1854.

32. *Morbid Changes in the Mucous Membrane of the Stomach.*—Dr. HANFIELD JONES read a paper on this subject before the Royal Medical and Chirurgical Society, May 23, 1854. The first part of this communication comprised a description more particularly of the minute glandular structure of the mucous membrane of the stomach, in which the author corroborated the account given by Kölliker. On first commencing his researches into this subject, he was not aware that lenticular or solitary glands had been seen in the mucous membrane of this viscus. The author, not imagining they could be normal structures, had at first viewed them as simply nuclear deposits, supposing they were of new formation. Kölliker had observed that these lenticular glands did not constantly occur in the stomach of adults, even though they might be possibly always present in those of children. In very many cases he had met with no traces of them; in others they were seen to be extremely numerous, covering the whole surface of the stomach; yet the thought could hardly be excluded, that the morbid conditions of the part, which were always present, had not had

something to do with their formation. The author thought it difficult to fix any exact limit to the healthy development of these glands. He considered the gastric tissue in its most normal and efficient state when there were but few of these glands or nuclear masses, and when those that existed did not encroach materially upon the tubular or gastric glands of the stomach. He thought great individual varieties might exist; that they were naturally larger and more numerous in some individuals than in others. He ventured to think that these solitary glands, and their groups in the intestines (Peyer's patches), had really no use, and fulfilled no function in the human body, but existed in a rudimentary state, in obedience to the law of unity of type. They might be regarded as portions of undeveloped embryo substance, existing in inverse ratio to the surrounding specially organized tissues, and with this view their simple nuclear structure, so common in embryonic parts, was very accordant. The author thought that the epithelial contents of the tubular glands were thrown off during digestion, and formed an important constituent of the gastric juice, probably the so-called pepsin. The evidence of this rested on examination of the stomachs of animals killed while digestion was proceeding, and of a man who died suddenly soon after a meal. The following deviations from the typically healthy condition of the stomach were mentioned as examples of morbid changes:—

1. *Nuclear masses.* It was doubtful what degree of development of these was to be considered as surpassing the physiological limit; but observation proved that they became both hypertrophied and atrophied, and the latter seemed to take place by a kind of liquefying, so that a cavity was formed containing a clear fluid and some nuclear corpuscles.

2. *Diffused nuclear formation.* The effect of this was, that the tubes became more or less atrophied and obscured by interstitial deposit.

3. *Intertubular fibroid formation.* The tubes became atrophied by the presence of a fibroid or granular deposit, in which some altered vestiges of the tubes might be brought into view by acetic acid.

4. *The tubes appeared to decay spontaneously,* but not from the presence of new fibroid tissue.

5. *Black pigmentary deposit,* occasionally within the tubes, more often between them; sometimes yellow pigment was found; both might be regarded as altered hæmatine.

6. *Cystic formation,* produced in one of three ways: First, a nuclear mass liquefied and left a cavity; secondly, while atrophy of the tubular glands was going on, a portion of one became distended; thirdly, a cyst was produced as a large vesicle, a true new formation.

7. *Mammillation,* usually affecting the pyloric region.

8. *Gathering up of the lower parts of the tubes,* so as to form a group of convolutions like the acini of a conglomerate gland.

9. *Unhealthy condition of the epithelium of the tubes,* occasionally exhibiting the characters of a fatty degeneration.

10. *Self-digestion* was of frequent occurrence, and mostly confined to the splenic region; the mucous membrane was more or less deeply coloured, thinned, smooth, and semi-translucent. In extreme cases the nerves and vessels were seen altered, as when treated by strong acetic acid.

11. *Small dark-red, circumscribed spots,* manifestly the result of hemorrhage; ulceration often took place in these.

12. *The tenacious adhesive mucus of gastric catarrh.* Its microscopical characters were very clearly described.

The author had observed *torulæ* in the mucus of the stomach of a diabetic patient. The paper was accompanied by a table of one hundred cases of *post-mortem* examinations, in which the morbid changes in the mucous membrane of the stomach were fully and minutely described, together with an analysis of these cases, in which the influence of age and sex, habit of life, &c., were considered, as well as the frequency of the several morbid changes already enumerated. Eight drawings, executed by the author, illustrated very intelligibly the diseased conditions which the microscope had revealed.—*Med. Times and Gaz.* June 3, 1854.